Utilities and Energy Efficiency: The Fifth Fuel

Panel presentation by Tom FitzGerald, Director, on "Why Energy Efficiency Makes Economic and Environmental Sense for Kentucky"
Kentucky Resources Council
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I've been asked to give my views on utilities and energy efficiency from the environmental non-governmental organization perspective. As I do anytime I am asked to speak, let me begin with full disclosure, so that you can appropriately discount anything that I might say thereafter.

I am Director of the Kentucky Resources Council, a nonprofit environmental advocacy organization providing legal and technical assistance without charge to low-income individuals, to community organizations, and to local governments concerning air, waste, water, land use and resource extraction issues. My perspective on energy issues has been forged by twenty-six years of representing those who live downhill, downwind and downstream of mining operations. In that time, I have buried one friend and client who was crushed to death by slurry from a coal waste dam collapse, and I have seen the lives and peace of mind of countless others subject to avoidable injury and damage from coal extraction.

Those costs - premature death due to occupational illness and avoidable workplace accidents, damage to roads from coal trucks overloaded by the producers, loss of security for individuals whose homes have been damaged by blasting, or been made unlivable by loss of water supplies, and whose peace of mind has been taken by fear of flooding made more likely and more severe by denuding of the forested watersheds up stream, and the costs of the loss of ecological integrity of land and water resources of a region blessed by a significant and diverse forest ecosystems – are costs borne on the backs of the residents of coal-producing regions and are not currently accounted for in the utility regulatory policy. And unfortunately, while we have developed mechanisms to incorporate, and to impose primarily on customers rather than shareholders (of course), the add-on costs of better controlling particulate, So2, NOx and other air pollutants from the combustion of coal, the substantial costs in human and ecological terms remain off-budget in the ratesetting process, skewing the identification and analysis of what energy option is truly "least-cost."

My representation takes me across the Commonwealth, and beyond coal-producing regions as well. Since KRC represents those who cannot otherwise afford representation on environmental issues, our clients are among those most vulnerable to the dramatic and sharp increases in the cost of electricity that is predicted as regulated electric utilities propose construction of new generating capacity and continue to retrofit existing capacity to better internalize pollution impacts and to lighten the footprint of coal-fired utilities on the environment. Since it is commonly acknowledged that within the anticipated design life of currently proposed centralized coal-fired power plants, accounting for carbon emissions and significant reductions in those emissions will become a regulatory obligation, the cost of coal-fired electric power will rise even higher to account for our

failure to properly cost and compare energy options before this new generation of capacity is approved.

So when one asks me "why energy efficiency makes economic and environmental sense for Kentucky" I have a thousand reasons – one for each person I've represented over the years; who have paid dearly for our cheap power.

We owe it to our children, whom we have short-changed in budgetary and ecological terms to pay for our ecological binge, and to each other to look before we leap into another round of coal-fired plant construction, to inject some honesty and some reason into the equation.

My good friend Bill Caylor of the Kentucky Coal Association has been in the unenviable position of defending mountaintop removal coal mining in recent years, and is fond of saying that "we can't conserve our way to prosperity."

I could not disagree more.

Many of the problems we have seen, both in economic instability and in geopolitical instability that are associated with energy are a result of short-sighted policies that have resulted in imbalances between supply and demand for energy. Increasing supply is expensive, time-consuming, and environmentally damaging.

Investment in cost-effective energy efficiency – in generation, the transmission, and in consumption within the residential, commercial, manufacturing and institutional sectors, is our greatest untapped energy resource and is the key element to a more stable energy and economic environment for Kentucky and for the nation. Investments in energy efficiency have the potential to displace a significant amount of the projected future load growth, flattening peak demand and allowing us to delay or avoid entirely the construction of new generating capacity, and empowering customers to better control their energy costs.

Those investments that have been made to date have contributed significantly to our current situation – our total primary energy use per capita in 2000 was identical to that in 1973, a period in which the GDP increased 74%. But, as commentators have suggested, there is still an enormous potential for additional cost-effective energy savings. Increasing the efficiency of our homes, appliances, vehicles, businesses and industries should be the cornerstone of a national energy policy, since it is a win-win for economic growth, national security, reliability and environmental protection.

What impediments exist to improving efficiency in the generation, transmission, and utilization of energy, and where should we focus our energies?

* Utility rate-setting policies, including the failure to fully cost the energy option, and rate formulae that couple volume of sale of electricity with revenue.

The current rate-setting formulas for utility companies favor the sale of power, not responsibility in the choice of supply or efficiency in the conversion and use of power. The formula favors the cheapest purchased fuel, which is typically coal, not the energy source that is most ecologically sound, nor even coal that is mined by the most responsible and least-impact methods. Utilities drive fuel cost margins down, and operators respond by shedding costs – replacing labor with larger machines, substituting constructed compacted fills with end dumped fills, availing themselves of bankruptcy laws as a shield against responsibility to labor and neighbor.

Changes in the rate-setting formula for electric and gas utilities that more fully cost and account for environmental and social costs will help to end the artificial subsidies that skew the market by allowing those costs to be excluded from consideration, impede the deployment of and investment in sustainable, renewable energy sources and in efficiency, and make fuel choices that cost the environment and public dearly, seem inexpensive. Full life and fuel cycle cost accounting, the cost of coal-fired generation is understated by ignoring full fuel cycle costs, including environmental compliance costs now imposed by surcharge, must be considered in determining what option is "least cost," and "east cost" must be defined as least cost to the end user. Investment in energy efficiency, particularly investment in end-use efficiency in those sectors that consume the most significant portion of the utility output, must be placed on the same footing as investments in new generation and transmission. We need to better define what is "fair, just and reasonable" in our utility rate setting process, and better align the interests of consumers in reliable, affordable energy with ecological and social responsibility, rewarding efficiency and prudence rather than artificially maintaining low rates through shedding ecological costs. As we do, programs now at the fringes of utility policy, such as weatherization, appliance efficiency, CHP and cogeneration, increasing efficiency in new and remodeled construction, will move to the center of utility energy policies.

* I appreciate very much the Governor's inclusion in Executive Order 2006-1298 of the request to the Office of Energy Policy for a study of the impact of incorporating Energy Efficiency into retail rate design. I would encourage the Governor and the Office of Energy Policy, rather than conducting a traditional in-house study, to instead build upon and support the efforts of the recently-begun collaborative effort of NGOs and utilities, in which the OEP is participating, called the Utility Working Group on Energy Efficiency and Cogeneration. That working group has begun the process of assessing current cost effective efforts and has set a goal of identifying barriers to and expanding programs for energy efficiency. It is the dialogues among those constituencies that produces much more value than an internal study.

* Promoting not only the deployment of new efficient appliances, but also the replacement of existing inefficient major appliances. While tax credits are of some use, they miss those in the residential sector most in need of improvement in home heating and cooling and major appliance efficiency improvements; those low- and fixed-income individuals who are often also most vulnerable to the sticker shock that will accompany major investment in new coal-fired capacity because their utility costs are a higher

percentage of income and the housing stock that the own or rent is often least efficient in utilizing energy.

* The historic focus of the Public Service Commission must be broadened. Within the confines of the statutory powers delegated to the Commission, the PSC has well-served the public by providing the lowest rates of electricity in the nation. Those rates have, unfortunately, created artificial expectations based on the externalizing of many of those cost items, particularly environmental costs, the accounting for which threaten significant and unpredictable increases in cost.

The Governor is currently considering an appointment to the Public Service Commission, and an unprecedented coalition of labor, environmental, low-income and fair housing groups have asked the Governor to appoint an individual representing the public interest perspective who understands energy efficiency and energy policy issues.

* Another issue is that of housing energy efficiency. There is a huge potential for improvements in energy efficiency and cost-savings to consumers in the existing residential rental and owner-occupied housing sector, as well as in new housing. Our failure to incorporate energy principles into our building code and new housing, to assure adequate inspections and enforcement of building code requirements statewide, and to invest meaningfully in improving energy efficiency in existing housing stock is a lost opportunity to date. Our state's new housing stock, increasingly unaffordable to many of our state's citizens, continues to be built and sold with little concern over the costs to homeowners of heating and cooling, and less consideration of efficiency in choice of materials and design. Outside of the innovative work of relatively few architects and contractors, the norm is far below what is appropriate.

* Lack of mechanisms for consumer fuel choices is an issue. Those choices (so called green-power programs where energy derived from sources other than fossil fuels are made available to the consumer) are provided by 14 of our utilities and four municipalities, yet not by the major investor-owned utility in the Commonwealth; LG&E and KU.

* Finally, communicating success and harnessing the significant abilities of our research and educational institutions is essential in identifying, promoting, and creating "best practices" in energy efficiency. Amory Lovins tells the joke about the economist who was walking down the street and saw a $20 bill on the pavement. He didn't pick it up because he assumed it didn't exist; if it did, he reasoned, someone would have already picked it up!

We make a mistake if we assume that the way we do things is the best and most efficient, and that if an idea or new approach were better, someone would have already implemented it.

In closing, all energy sources have a footprint, and as we look at the array of options available, the first principle that must inform our discussion is honesty. We have got to

stop cooking the books by ignoring costs that flow directly from our energy source production, transportation, conversion and waste disposal decisions and choices. Full-cost accounting – the so-called triple bottom line – is a first step.

Dialogue is the second. I wish you all well as you move towards small group discussions of how to move this Commonwealth forward to a more rational, sustainable energy future.